

# **INFLATABLE CHESS GAME**

## **FIELD OF THE INVENTION**

The present invention relates generally to games, such as board games. More particularly, this invention relates to a chess game.

## **BACKGROUND OF THE INVENTION**

Chess is typically an intellectual game between two players. Traditional chess does not require substantial physical activity to play. Oversized chess games, however, can be used to involve more than two players and/or to provide a more physical aspect to the game. Existing oversized chess games feature an oversized game board and oversized game pieces. The game pieces are sometimes as large as a person. It is not uncommon for several players to participate in the oversized chess game by lifting and moving game pieces during play. Unfortunately, existing oversized chess games are not easily portable. Nor are they easily storable. To the contrary, existing oversized chess games are typically designed to be set up, used, and maintained in one location, such as on a cruise ship or in a park. The oversized chess board and chess pieces are typically made of wood or heavy plastic. These materials are heavy and bulky. Therefore, the game is unnecessarily difficult to transport, store, and play. These materials are also quite expensive, making the game relatively expensive. Further, the rigid oversized game pieces are less than ideal from the perspective of safety. Thus, it would be desirable to provide a chess game that is oversized and yet very portable, easy to assemble, easy to store, easy to play, safe, and inexpensive.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a top end view of a game board in accordance with certain embodiments of the present invention;

Figure 1A is a broken-away top end detail view of section 1A of the game board shown in Figure 1;

Figure 2 is a side end view of an inflated chess piece in an expanded configuration in accordance with certain embodiments of the invention;

Figure 2A is a perspective view of a deflated chess piece in a collapsed configuration in accordance with certain embodiments of the invention;

Figure 3 is a bottom end view of a chess piece bearing gaming indicia in accordance with certain embodiments of the invention;

Figure 4A is a bottom end view of a chess piece in accordance with certain embodiments of the invention, the configuration of one particular bladder being shown schematically;

Figure 4B is a bottom end view of a chess piece in accordance with certain embodiments of the invention, the configuration of one particular bladder being shown schematically;

Figure 4C is a bottom end view of a chess piece in accordance with certain embodiments of the invention, the configuration of one particular bladder being shown schematically;

Figure 5 is a perspective view of a carrying case in accordance with certain embodiments of the invention;

Figure 6 is a schematic representation of an inflation hose that is provided in accordance with certain embodiments of the invention;

Figure 7 is a schematic cross sectional view of an inflation hose that is provided in accordance with certain embodiments of the invention;

Figure 7A is a perspective view of an air pump that is provided in accordance with certain embodiments of the invention;

Figure 8 is a schematic side end view of an inflated chess piece in an expanded configuration next to a person in accordance with certain embodiments of the invention;

Figure 8A is a cross-sectional view of the chess piece shown in Figure 8 taken along lines 8A;

Figure 8B is a broken-away detail view of section 8B of the wall of the chess piece shown in Figure 8A;

Figure 9 is perspective view of a deflated and roll-bundled chess piece in accordance with certain embodiments of the invention;

Figure 10A is perspective view of a deflated and roll-bundled chess board in accordance with certain embodiments of the invention;

Figure 10B is perspective view of a deflated and fold-bundled chess board in accordance with certain embodiments of the invention;

Figure 11 is a top end view of a game player, a game spectator, and a chess board having thereon operatively positioned thirty two inflated chess pieces in accordance with certain embodiments of the invention; and

Figure 12 is a perspective view of a chess game kit in accordance with certain embodiments of the invention.

### **DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS**

The following discussion is presented to enable a person skilled in the art to make and use the invention. Various modifications to preferred embodiments will be readily apparent to those skilled in the art, and the principles disclosed herein can be applied to other embodiments and applications without departing from the spirit and scope of the present invention as defined by the appended claims. Thus, the invention is not to be limited to the embodiments shown, but is to be accorded the widest scope consistent with the principles and features disclosed herein. The following detailed description is to be read with reference to the figures, in which like elements in different figures have like reference numerals. The figures, which are not necessarily to scale, depict selected embodiments and are not intended to limit the scope of the invention. Skilled artisans will recognize that the examples provided herein have many useful alternatives falling within the scope of the invention.

In certain embodiments, the present invention provides a chess game apparatus. In these embodiments, the apparatus comprises a plurality of inflatable chess pieces. Preferably, each inflatable chess piece has at least one flexible wall W defining at least one interior air-space cavity AC that is adapted for being filled with air. When each chess piece is inflated, it desirably assumes an expanded configuration whereas when each chess piece is deflated it desirably assumes a collapsed configuration. The collapsed configuration is more compact than the expanded configuration. In many embodiments, each chess piece has at least one inflation opening that facilitates flowing

air into the chess piece during inflation and that can be closed in a substantially air-tight manner.

Thus, certain embodiments of the invention provide a chess game apparatus that includes a plurality (i.e., at least two) of inflatable chess pieces. Preferably, substantially all (or all) of the chess pieces in the chess game apparatus (e.g., in the chess set) are inflatable. In certain preferred embodiments, the chess game apparatus includes thirty two inflatable chess pieces 50. In many of these embodiments, sixteen of the inflatable chess pieces are readily identifiable (e.g., are colored, patterned, labeled, and/or shaped) as being of one team while sixteen other of the inflatable chess pieces are readily identifiable as being of another team.

Preferably, each inflatable chess piece when deflated in the collapsed position can be folded and/or rolled into a bundle. Figure 9 depicts a chess piece that has been deflated in the collapsed configuration and roll-bundled (i.e., rolled-up into a bundle). The bundled chess piece 50B has a major dimension MD. Preferably, the inflatable chess pieces are constructed to allow them to be folded and/or rolled (and later unfolded and/or unrolled) without being damaged. Generally, each inflatable chess piece should be sufficiently flexible and durable to be repeatedly folded and/or rolled, and repeatedly unfolded and/or unrolled, without suffering damage that creates an air leak in the piece.

The wall(s) of each inflatable chess piece is/are desirably formed of a thin, flexible material (e.g., a sheet or film that is flexible yet self-supporting). For example, the flexible wall W of each inflatable chess piece 50 can be a non-rigid sheet comprising a fabric or plastic material. The fabric or plastic material is desirably a lightweight material. In certain preferred embodiments, the flexible wall material is formed of plastic. In certain particularly preferred embodiments, the flexible wall material is formed of a PVC based plastic. The chess pieces can also be UV protected to reduce the risk of color loss due to the sun. In certain preferred embodiments, the flexible wall W of each inflatable chess piece has a thickness WT of less than about 1/8<sup>th</sup> inch. In certain particularly preferred embodiments, the flexible wall W of each inflatable chess piece has a thickness WT of less than about 1/16<sup>th</sup> inch. In certain particularly advantageous embodiments, one or more of the inflatable chess pieces in the chess set

(e.g., all of the inflatable pieces in the set) bear glow-in-the-dark indicia, facilitating playing the game in low light (e.g., at night). In one such embodiment, the wall of at least one of the inflatable chess pieces (and perhaps optimally of all of the chess pieces in the set) comprises (e.g., is formed of) glow-in-the-dark material (e.g., a conventional glow in the dark PVC sheet). If desired, the wall W can bear glow-in-the-dark paint, ink, labeling, or the like.

In certain preferred embodiments, the inflatable chess pieces are oversized. That is, they have an oversized configuration (characterized by dimensions that are oversized relative to conventional chess figures). In some cases, the inflatable chess pieces each have an oversized configuration characterized by dimensions sized (e.g., that are sufficiently large) to prevent the body of a player standing at one side of a playing board on which all the inflatable chess pieces are operatively positioned (e.g., positioned in their respective game-starting locations on the board) from shielding all the thus-positioned inflatable chess pieces from the view of a spectators located five feet or more away from the player, as can be appreciated with reference to Figure 11. Similarly, in some embodiments, the dimensions of a provided flexible playing board are sufficiently large to prevent the body of such player from shielding substantially the whole playing board from the view of such a spectator.

The inflatable chess pieces desirably are oversized such that players are not required to perform excessive bending-over to pick up and move a chess piece. At the same time, the inflated chess pieces are desirably not so large that children would have a hard time handling the chess pieces during play. In many embodiments (though not all, as the invention extends to extraordinarily large inflated chess pieces, e.g., each having a height of more than about 10 feet, and in some embodiments having a height of more than about 20 feet), the chess piece is not so large that an undue amount of time is required for inflation. In some embodiments, the inflated chess pieces are sized so that the top of each inflated chess piece stands somewhere between the knee K and the waist WA of an adult game player P, as can be seen with reference to Figure 8. Preferably, the height H of each inflatable chess piece is between about 1 foot and about 10 feet, perhaps more preferably between about 1.5 feet and about 7 feet, and perhaps optimally between about 1.5 feet and about 3.5 feet. The diameter or width of

each inflatable chess piece preferably is between about 1 foot and about 1.5 feet. Perhaps optimally, the heights of the inflatable chess pieces are between about 1.5 feet and about 3.5 feet. The exact dimensions of the chess pieces, however, can be varied as desired.

As noted above, each inflatable chess piece preferably can be folded and/or rolled into a bundle when deflated in the collapsed position. Figure 9 depicts an inflatable chess piece that is deflated in a collapsed configuration and roll-bundled. The major dimension MD of the deflated, bundled chess piece is the length of the roll in this particular embodiment. However, if the chess piece were fold-bundled, the major dimension would likely be either the length or width of the bundle. In certain preferred embodiments, each inflatable chess piece has an oversized configuration and yet when deflated in the collapsed configuration can be folded and/or rolled into a bundle having a major dimension of less than about two feet. In certain particularly preferred embodiments, each inflatable chess piece has an oversized configuration and yet when deflated in the collapsed configuration can be folded and/or rolled into a bundle having a major dimension of less than about 20 inches.

In certain preferred embodiments, all of the inflatable chess pieces of the chess game apparatus are deflated in the collapsed configuration, and all of the chess pieces of the chess game apparatus are positioned inside a single carrying case. In certain particularly preferred embodiments, all of the chess pieces of the chess game apparatus are inflatable, and all of the inflatable chess pieces are deflated in the collapsed configuration and positioned inside a single carrying case. In Figure 5, all of the deflated, collapsed inflatable chess pieces are bundled and positioned inside the carrying case 100. In some embodiments of this nature, the chess game apparatus includes thirty two (32) inflatable chess pieces. Preferably, the chess pieces and the carrying case are constructed such that a single person can carry the thus packed case.

Preferably, the inflatable chess pieces are very lightweight when they are not filled with filler material. In certain preferred embodiments, each inflatable chess piece when substantially emptied of filler material and deflated in the collapsed configuration has a weight of less than about two pounds. In certain particularly preferred

embodiments, each inflatable chess piece when substantially emptied of filler material and deflated in the collapsed configuration has a weight of less than about 14 ounces.

Preferably, each chess piece when inflated is identifiable as a particular chess character. For example, in certain embodiments, each chess piece when inflated takes the shape of a particular chess character (e.g., a King, Queen, Knight, Bishop, or Pawn). This is perhaps best appreciated in Figures 2 and 8. Conjointly, each chess piece when inflated desirably defines a substantially planar bottom surface. This is perhaps best appreciated with reference to Figures 2, 8, and 3-4C.

In certain embodiments, each chess piece has a top portion 60 and a bottom portion (or "base") 70. Preferably, the top portion 70 of each chess piece is indicative of a particular chess character. Further, the bottom portion of each chess piece preferably defines a substantially planar bottom surface (e.g., a chess board-contacting surface) 90. Thus, each chess piece desirably has a bottom wall that defines a substantially planar bottom surface. In some embodiments, when each chess piece is inflated, its top portion 60 takes the configuration of a particular chess character and its bottom portion 60 defines a substantially planar bottom surface 90.

In certain embodiments, each inflatable chess piece (or at least one of them) has a weight-receiving system. The weight-receiving system has (i.e., can be selectively put into either of) a weighted state and an un-weighted state. In the weighted state (or condition), the weight-receiving system includes one or a plurality of weights removably disposed on (e.g., carried removably by or otherwise removably attached to) the chess piece. Further, in the weighted state, the weight(s) desirably rest(s) on the ground (a bottom wall or pocket wall of the chess piece can optionally be between the weight(s) and the ground). Thus, when the optional weight-receiving system is in its weighted state (e.g., when it is in a weighted configuration), the weight(s) disposed on the chess piece stabilize(s) the inflated chess piece against tipping over. The optional weight-receiving system can be a weight-receiving structure, such as a pocket configured to removably retain one or more desired weights, or a fastener configured to be attached to one or more desired weights. The desired weights, when provided, can each be a bean bag or another weighted bag, a rubber coated piece of metal, a block configured

to be fit snugly inside a pocket or sleeve of the chess piece, etc. In the un-weighted state, the weight-receiving system desirably carries no such weights.

In certain preferred embodiments, each inflatable chess piece (or at least one of them) has a weight-receiving system WRS comprising a bladder B that is adapted for being filled with a filler material to weight the chess piece. Preferably, the bladder B defines a weight-receiving cavity BC that is physically separated from (e.g., by a flexible wall that is substantially impermeable to air) the interior air-space cavity AC. This weight-receiving cavity BC preferably is (e.g., is defined by a wall that is) adapted for being repeatedly filled with, and emptied of, filler material, such as sand and/or water. In some cases, the bladder has a selectively openable and closeable bladder opening 85 for filling and emptying the weight-receiving cavity of the bladder. In such cases, each inflatable chess piece preferably includes a plug or cap that can be used to close the bladder opening so as to trap filler material inside the weight-receiving cavity of the bladder. A variety of conventional plug or cap types can be used.

In certain preferred embodiments, the bladder is adapted for receiving (and retaining in a substantially leak-proof manner) sand as the filler material. Thus, the bladder in these embodiments preferably is (e.g., is defined by a wall that is) substantially impermeable to sand. In one embodiment, the bladder contains (e.g., is filled with) sand. In certain particularly preferred embodiments, the bladder is adapted for receiving (and retaining in a substantially leak-proof manner) water as the filler material. Thus, the bladder in these embodiments preferably is (e.g., is defined by a wall that is) substantially impermeable to water. In one embodiment, the bladder contains (e.g., is filled with) water. Certain embodiments provide a plurality of inflated chess pieces each having an interior air-space cavity filled (optionally to a super-atmospheric pressure) with air and a bladder filled with sand and/or water.

Preferably, each of the inflatable chess pieces can be inflated in less than one minute, and more preferably between about 3-45 seconds. In one embodiment, the chess game includes 32 inflatable chess pieces and the whole set of chess pieces can be inflated in less than about 40 minutes, more preferably less than about 30 minutes, and still more preferably less than about 20 minutes. Given the present teaching as a guide, skilled artisans would be able to select interior chess piece volumes and an



accompanying air pump that would be appropriate for inflating each chess piece in the time frames stated in this paragraph.

In some embodiments, each inflatable chess piece has a bottom portion 70 at which the bladder is disposed, such that when the bladder of each inflated chess piece is filled with filler material there is created a weighted base that (e.g., when placed on the ground) stabilizes the chess piece against tipping over. This is desirable to prevent the inflated chess pieces from tipping over during play, particularly in the face of wind. In certain embodiments, the bladder is glued, stitched, or otherwise attached to the bottom wall of the inflatable chess piece. In some cases, the bladder is simply attached to (e.g., by glue, stitching, or the like) the underside of the bottom wall of the inflatable chess piece. In other cases, the bladder is attached on top of the bottom wall of the chess piece, so that the bladder is inside the wall of the chess piece. In some such cases, the bladder has a conduit extending through an opening in the wall, so that the conduit is externally accessible to a game player and thus can be used for delivering sand, water, or the like through the conduit and into the weight-receiving cavity of the bladder.

In certain embodiments, the bladder of each inflatable chess piece occupies less than the whole cross-sectional area of a bottom portion of the chess piece. This can be appreciated with reference to Figures 8 and 8A. This allows the inflated game piece to be provided with a weighted base without having to fill a bladder spanning the whole cross-sectional area of the bottom portion of the chess piece. In certain preferred embodiments of this nature, the bladder has a stabilizing configuration wherein a weight-receiving cavity BC defined by the bladder B has a major dimension MDB of at least about  $\frac{1}{2}$  of a major dimension MDCS of the cross-sectional area of the bottom portion of the chess piece. For example, in these embodiments, when the cross-sectional area (e.g., the area of a horizontal cross section of the bottom portion 70 taken when the inflated chess piece is standing vertically) of the bottom portion of each chess piece has a generally circular shape and a diameter, the weight-receiving cavity has a major dimension of at least about  $\frac{1}{2}$  of this diameter. Further, when the cross-sectional area of the bottom portion of each chess piece has a generally square shape and a width, the weight-receiving cavity has a major dimension of at least about  $\frac{1}{2}$  of this

width. In certain particularly preferred embodiments, the weight-receiving cavity has a major dimension of at least about  $\frac{3}{4}$  of the major dimension of the cross-sectional area of the bottom portion of the chess piece. In certain embodiments, the bladder has a stabilizing configuration that is substantially triangular (as exemplified in Figure 4a), substantially star-shaped (as exemplified in Figure 4b), or substantially cross-shaped (as exemplified in Figure 4c). In another embodiment, the bladder has an annular configuration, characterized by a ring-shape having a diameter of at least about  $\frac{1}{2}$  that of the major dimension (e.g., a diameter) of the cross-sectional area of the bottom portion of the inflated chess piece.

The bladder, when provided, can optionally be integrally formed with the wall of the chess piece. Generally, the filler material can be any material that imparts weight in the bladder. As connoted above, water and sand are both suitable filler materials. In one embodiment, the bladder carries (and when empty is adapted to carry) about 16 ounces (perhaps more preferably at least about 18 ounces) of filler material. As noted above, by providing weight in the bladder of each inflated game piece, the game piece is balanced and stabilized when positioned in an upright (e.g., "standing") position. Since the chess pieces in the present embodiments are adapted to be filled with, and emptied of, weighted filler material, rather than including permanent bottom weighting, the chess pieces can be emptied for easy transport and storage.

As noted above, one or more bladder openings can be provided on the bladder for filling the bladder with filler material. The bladder opening(s) can be provided anywhere on the chess piece. Each bladder opening desirably is in communication with the weight-receiving cavity of the bladder. Preferably, the location of each bladder opening is such that a person can easily use/access the opening(s) to fill the bladder. A cap or valve can also be provided for sealing each bladder opening, so as to prevent the filler material from leaking out of the bladder. A conventional cap or valve can be used. In certain preferred embodiments, a leak proof cap (e.g., of plastic) is provided for each bladder opening. In certain particularly preferred embodiments, the bottom portion 70 (e.g., the bottom surface 90) of each inflatable chess piece has (e.g., defines or bounds) at least one bladder opening 85.

Preferably, each inflatable chess piece has one or more inflation openings for use in flowing air into the chess piece. A cap or valve can be provided for sealing each inflation opening to prevent air from leaking out of the inflated chess piece. A conventional cap or valve can be used. Each inflation opening can be configured for facilitating the delivery of air into the chess piece manually and/or automatically (e.g., by an air pump 205, as shown schematically in Figure 7A). For example, a small inflation opening (e.g., having a diameter of less than about  $\frac{1}{2}$  inch) equipped with a pinch valve (optionally having an attached, e.g., integral, insert or plug, such as an attached plastic insert or plug, for sealing the valve) can be provided for manual inflation. A conventional pinch valve can be used. Additionally or alternatively, a large opening (e.g., having a diameter of at least about  $\frac{3}{4}$  inch, and perhaps less than about 2 inches) equipped with a cap or plug (e.g., a screw-on cap with threading matching threading on a wall bounding the large inflation opening) can be provided for automatic inflation, such as by an air pump. For example, this opening can be configured to operably receive a nozzle of a desired air pump. It is to be understood that any number of inflation openings, whether large and/or small, whether for manual and/or automatic inflation, can be provided on each chess piece. Further, the opening(s) can be provided anywhere on the chess piece. In certain preferred embodiments, the inflation opening(s) is/are provided on the bottom (e.g., chess board-contacting) surface 90 of the base 70. In certain particularly preferred embodiments, each inflatable chess piece has at least two inflation openings each being selectively openable and closeable. Preferably, one of these inflation openings is adapted for manual inflation (e.g., is a small opening equipped with a pinch valve) and another of these inflation openings is adapted for automatic inflation (e.g., is a large opening configured to operably receive the nozzle of a desired air pump, optionally having no pinch valve). By making the chess pieces inflatable, they can be deflated and stored in a small area.

In certain preferred embodiments, at least one of the inflatable chess pieces bears gaming indicia. Since the inflatable chess pieces in some embodiments have oversized configurations, they facilitate placing many types of gaming indicia on, for example, the bottom surface 90 of each chess piece. This would not be convenient with small, conventional chess pieces. In certain particularly preferred embodiments, each

of the inflatable chess pieces bears gaming indicia. In some cases, gaming indicia is provided on a base portion 70 of at least one of the inflatable chess pieces. For example, gaming indicia can be provided on a bottom surface 90 of at least one of the inflatable chess pieces. Preferably, the gaming indicia includes information indicating a character name for the particular chess piece on which the indicia is borne and/or indicating allowed moves for the particular chess piece on which the indicia is borne. In some cases, the gaming indicia includes a graphic representation 98 of allowed moves for the particular chess piece on which the indicia is borne. The graphic representation can comprise, for example, a chess board diagram. In some cases, the gaming indicia includes written instructions 99 describing allowed moves for the particular chess piece on which the indicia is borne.

For example, one or more chess pieces may bear writing (e.g., text) 99. The writing can be any information pertaining to the game of chess (e.g., instructions for playing chess and/or rules of chess). The writing can be provided at any location on the chess piece. In certain preferred embodiments, the writing is provided on the bottom portion 70 of the game piece (e.g., on a bottom surface). In certain embodiments, one type (e.g., one particular type of character) of the chess pieces bears written instructions on how to play the game of chess and/or rules of chess. For example, each King may bear such complete instructions and each of the remaining characters may bear a written instruction on how to play (i.e., the allowed moves for) that character and/or the name of the piece. In one embodiment, each inflatable chess pieces bears brief instructions including the name of the piece, a brief description of the allowed moves for that piece, and a diagram of a chessboard including an illustration of moves that character is allowed to make. Thus, it can be appreciated that in certain embodiments, the gaming indicia includes a diagram or other graphic representation of the allowed moves for a particular chess character, optionally together with written information describing the allowed moves for such character.

Figs 2 and 3 depict a chess piece 50 according to certain embodiments of the invention. As shown in Fig. 2, the chess piece preferably has a top portion 60 and a bottom (or "base") portion 70. Preferably, the base portion 70 is a bottom-most portion (i.e., is at one end) of the chess piece. The illustrated top portion 60 is configured like

(i.e., shaped like) a Knight character. Preferably, the base portion 70 has a bladder and defines a bottom (e.g., chess board-contacting) surface 90. When provided, the bladder preferably occupies space adjacent (e.g., space inside) the base portion 70 of the inflated chess piece.

Fig. 3 is a bottom end view of the base 70 of a Knight piece in accordance with certain embodiments. The bottom surface 90 here has a diagram 98 illustrating the moves a Knight can make. A written explanation 99 is also provided on the bottom surface 90 describing the moves the Knight can make. In Fig. 3, a bladder opening 85 is provided on the bottom surface 90. The opening 85 can be provided with a lid or plug (not shown) for securing (e.g., trapping) filler material inside the bladder 80. The optional lid or cap can be a leak-proof cap of various designs.

In the embodiment of Fig. 3, inflation openings 72, 74 are provided on the bottom surface 90 for flowing air into the chess piece. Here, inflation opening 72 (which is configured for automatic inflation by an air pump) is larger than inflation opening 74 (which is configured for manual inflation). Preferably, a lid or plug (not shown) is provided for opening 72, while a pinch valve (not shown) is provided for opening 74. The optional pinch valve allows a person to pinch the opening shut while taking breaths during manual inflation. Thus, when the chess piece is inflated and each inflation/deflation opening is closed, the air inside the chess piece is sealed against (i.e., is prevented from) escaping from the game piece. As a result, the inflated game piece stays inflated until at least one inflation opening on the game piece is opened to facilitate deflation.

In certain embodiments, each inflatable chess piece includes at least one handle HA for facilitating moving the inflated chess piece during play. In certain preferred embodiments, the handle is an inflatable extension of the chess piece. In other embodiments, the handle is a rope or plastic handle attached to the inflated chess piece. In some cases, each inflatable chess piece has a handle at the top of the piece (e.g., an inflated handle extending upwardly from the top of the inflated chess piece). In one such embodiment, the handle is an inflated loop handle (e.g., a handle having a generally annular configuration when inflated). In another such embodiment, the handle is an inflated ball handle (e.g., a knob-like inflated handle).

Figs 4a-4c schematically illustrate various bladder configurations according to different embodiments of the invention. In each of Figs 4a-4c, the bladder 80 occupies less than the whole cross-sectional area of the base 70. In Fig. 4a, the bladder 80 has a generally triangular configuration. In Fig. 4b, the bladder 80 has a generally star-shaped configuration. In Fig. 4c, the bladder 80 has a generally cross-shaped configuration (e.g., an "X-shaped" configuration). The bladder in one embodiment has a highly advantageous annular configuration (e.g., extending about the periphery at the base of the chess piece).

In certain embodiments, the chess game apparatus comprises a flexible chess board. For example, some embodiments provide inflatable chess pieces in combination with a flexible chess board. Other embodiments provide the inflatable chess pieces alone, and still other embodiments provide the flexible chess board alone. The chess board preferably comprises (e.g., is formed mainly of, consists essentially of, or consists of) a flexible material. For example, the board can be a flexible mat or flexible fabric. Preferably, the board is substantially permeable to wind (e.g., has a plurality of openings dispersed over a major portion of its area) such that that pockets of air tend not to build up under the board. This helps assure the board will not blow away during play. The board is sufficiently durable to allow players to walk on it without it being torn, ripped, or otherwise damaged. Further, the board preferably is sufficiently flexible to allow it to be folded and/or rolled, e.g., into a roll-bundle (shown in Figure 10A) or into a fold-bundle (shown in Figure 10B). In certain embodiments, the board is a foldable and rollable panel having openings dispersed over a major portion of its area. In these embodiments, the board preferably defines a plurality of small openings OP (e.g., each having a major dimension of less than about 1/8 inch, perhaps more preferably less than about 1/16 inch, and perhaps optimally less than about 1/32 inch). Preferably, these openings OP, which can be seen in Figure 1A, are dispersed over substantially the entire area of the board, or at least over substantially the entire playing region 30. In certain embodiments, the board is a mesh mat. For example, the board can be a durable weatherproof mesh. In some cases, the mat is constructed of a PVC-type plastic (e.g., a mesh of such plastic).

Fig. 1 depicts a chess board according to one preferred embodiment of the invention. The illustrated chess board 10 has a playing region 30 and a peripheral region 20. The playing region 30 preferably delineates the pattern of a standard chess board. In more detail, the board preferably delineates sixty four (64) contiguous playing squares. The squares are commonly of alternating color, e.g., black and white. While a standard chess pattern is preferred, alternate game patterns can be used. In one embodiment, the playing region 20 measures approximately 12 feet by 12 feet with each playing square measuring approximately 1.5 feet by 1.5 feet. The precise dimensions of the board can be varied as desired. Preferably, the board delineates a playing region 30 having a major dimension (e.g., a major width) of at least about three (3) feet, more preferably at least about eight (8) feet, and perhaps optimally at least about ten (10) feet (e.g., about twelve feet or more). In certain embodiments, the board (or at least the playing surface 30 of the board) is UV protected, so as to reduce the risk of color loss due to the sun. The peripheral region 20 is preferably provided with holes or openings 25 for receiving stakes (e.g., four openings 25 can be provided at corners to accommodate four stakes). When provided, each such opening 25 is preferably reinforced, such as by stitching and/or a grommet, as is represented schematically by the line defining each opening 25 in Figure 1.

In certain embodiments, the playing region 30 and the peripheral region 20 are formed of the same material. For example, a single mesh mat can be provided wherein the playing region is colored to illustrate squares and the peripheral region is uncolored (or has a different color or an otherwise different appearance). Holes 25 would then preferably be provided in the peripheral region 20 of such a mesh mat.

In other embodiments, the playing region 30 comprises one material and the peripheral region 20 comprises a different material. Here, the peripheral region 20 can comprise a heavier and more durable material than the playing region 30. For example, the playing region 30 can comprise a mesh material and the peripheral region 20 can comprise a canvas material. A heavier peripheral region would tend to weight down the board along its periphery, preventing wind from creating air pockets beneath the board. A durable peripheral region also protects the edges of the board against wear and tear.

Certain embodiments of the invention provide a chess game kit. In certain embodiments, the kit comprises a carrying case and a plurality of inflatable chess pieces which when deflated can all be fitted into the carrying case. The carrying case is not required in all kit embodiments. Certain kit embodiments include a flexible chess board and inflatable chess pieces. Preferably, the flexible game board is oversized the inflatable chess pieces are oversized, as described above. In some cases, the kit includes a flexible chess board, inflatable chess pieces, and a carrying case. In certain embodiments, the kit includes an air pump. Thus, certain kit embodiments comprise inflatable chess pieces provided in combination with an air pump, preferably together with a carrying case configured to receive the air pump and all the deflated chess pieces. Further, certain embodiments provide a carrying case, inflatable chess pieces, and a flexible chess board, wherein the carrying case is adapted to received the bundled chess board and all the deflated chess pieces, optionally together with an air pump that is also configured to fit inside the case. Further, in certain embodiments, the kit includes an inflation hose, as described below.

The carrying case 100 is preferably a light-weight bag (formed of plastic, mesh, canvas, fabric, or the like). A horizontal zipper can optionally be provided at the top of the bag for keeping the bag closed. Of course, other closure mechanisms, for example, buttons or snaps, can be provided for closing the bag. Alternatively, the bag can be adapted for being left open. One or more handles (e.g., two leather handles) 120 can be provided to make carrying the bag convenient. In one preferred embodiment, the bag has at least five pockets. In this embodiment, the first pocket 101 is in the middle of the case and is adapted to receive the game board (e.g., when the board is bundled). Here, the second 102 and third 103 pockets are on opposite sides of the first pocket 101 and each 102, 103 is adapted to receive a group of deflated chess pieces. For example, the second pocket 102 may be adapted to receive all the game pieces of one team (e.g., of the black team) and the third pocket 103 may be adapted to receive all the game pieces of the other team (e.g., the white team). In one particular embodiment, the fourth pocket 105 is a small horizontal pocket (e.g., on the exterior of the bag) that is adapted to receive stakes (e.g., four or more stakes) for anchoring the game board to the ground. The illustrated fifth pocket 104 is adjacent the ends of the first 101, second



102, and third 103 pockets and is adapted to receive an air pump (optionally together with extension cords for the pump).

As noted above, in certain embodiments, the kit includes one or more air pumps. The air pump(s) is/are configured for filling the chess pieces with air. For example, each air pump can have a nozzle that is inserted into a chess piece inflation opening and held in place while air is pumped through the nozzle and into the chess piece. When provided, each air pump can be a conventional lightweight and compact 120 volt AC electric pump that is adapted for being recharged by plugging into a wall outlet or a car outlet. Preferably, the pump is one of this nature that is selected so as to be adapted for filling each inflatable chess piece in about 30 seconds or less, such that an entire set of inflatable pieces can be filled in about 20 minutes or less.

In certain embodiments, the kit includes an inflation hose. When provided, the inflation hose 201 preferably is adapted for being attached to the respective openings of multiple chess pieces so that a plurality of chess pieces can be inflated at the same time (e.g., at least two at a time). The inflation hose 201 preferably has an air pump opening 202 and a series of openings (e.g., nozzles) 218 spaced-apart along a length of the hose. The air pump opening 202 is adapted for receiving air from an air pump and the openings 218 are configured for insertion into chess piece inflation openings on multiple chess pieces so that air can be flowed simultaneously into multiple chess pieces. Caps or lids can be provided for each nozzle 218, e.g., to prevent air from escaping through a nozzle 218 not used during inflation. Figure 6 illustrates an inflation hose according to one embodiment of the invention. The hose 201 has an opening 202 for receiving air from the nozzle 206 of an air pump 205 (e.g., the opening 202 is preferably adapted for being operably engaged by the nozzle 206 of the air pump 205). A series of spaced-apart openings (e.g., hose nozzles) 218 are provided along a length of the hose 201. Caps (not shown) can be provided for sealing the hose openings 218. Figure 7 is a schematic cross-sectional illustration of an inflation hose embodiment having an advantageous air flow path 307, which is designed for minimizing pressure drop problems. Such an inflation hose may be desirable in that multiple chess pieces can be inflated at substantially equal rates regardless of the particular nozzles 218 from which they are filled.

In some embodiments, the kit further comprises stakes 92 that can be inserted through openings 25 the chess board and into the ground, thus securing the chess board to the ground. The stakes can be made of metal or any other durable material. The stakes are adapted to be inserted through holes 25 on the chess board and into the ground in a manner that secures the chess board to the ground. For example, the heads of the stakes can be larger than the holes in the chess board, so that when bottom tips of the stakes are inserted through the holes 25, the stake heads press the chess board against the ground. The components of the foregoing kit embodiments are depicted schematically in Figure 12. The components shown in Figure 12 are not to scale, as is the case with all the drawings of the present disclosure. While Figure 12 only depicts four bundled inflatable chess pieces, the kit can include any number of inflatable chess pieces, e.g., thirty two in many cases.

By inflating the oversized pieces and making the entire set compactable, lightweight, durable, and quick to assemble, an individual can take the game wherever it is desired to play. When the game playing is over, the chess pieces can be deflated, the deflated chess pieces can be rolled and/or folded up, the chess board can be rolled and/or folded up, and then the chess pieces and the chess board can be inserted into a carrying bag. The construction of the present chess game allows it to be relatively affordable compared to the giant chess games that are currently available.

While various embodiments in accordance with the present invention have been shown and described, it is understood the invention is not limited thereto, and is susceptible to numerous changes and modifications as known to those skilled in the art. Therefore, this invention is not limited to the details shown and described herein, and includes all such changes and modifications as encompassed by the scope of the appended claims.